AO 91 (Rev. 02/09) Criminal Complaint

| Unite  | d States Dista<br>for the<br>Western District of Nev  | rict Court   | FEB 2.2 2016  C. LOEWENGUTH, CLEAR  ERN DISTRICT OF  |
|--|---|--|--|
| United States of Amerov.  BIN (BEN) WEN  Defendant   | ,<br>)  | Case No. 16-MJ- <b>4</b>   | 1021   |
|  | CRIMINAL COMPLA   | AINT   |  |
| I, the complainant in this cabelief.  Between on or about 2005 District of New York, the defendant offenses described as follows:  the defendant has committed violationaking false claims);18 U.S.C. § 13 U.S.C. § 13 U.S.C. § 13.49, a scheme to transfer U.S.C.§1957, and conspiracy to communication the criminal complaint is based on X. Continued on the attached sheet.  Please see attached affidavit | int violated 18 U.S.C. §§ 286 and 343 (wire fraud), conspirate funds obtained through specimit money laundering in vithese facts: | n the County of Ch. 286, 287, 1343, 134 and 287(conspiracy to commit wire frecified unlawful activiolation of 18 U.S.C. Complainan | emung in the Western 9, 1957, and 1956(h) make false claims and raud in violation of 18 vities in violation of 18 s 1956(h). |
| Sworn to before me and signed in m   | y presence.   | Craig Furey, S Printed nam   |  |
| Date: 02/22/20/6   |   | Marian w Pays<br>Judge's sign  | ature  |

City and State: Rochester, New York Hon. Marian W. Payson, U.S. Magistrate Judge Printed name and title

# AFFIDAVIT IN SUPPORT OF A CRIMINAL COMPLAINT

16-129-4021

| STATE OF NEW YORK | ) |     |
|-------------------|---|-----|
| COUNTY OF MONROE  | ) | SS. |

- I, CRAIG FUREY, being duly sworn, do depose and say:
- 1. I am a Special Agent with the United States Department of Transportation, Office of Inspector General (DOT/OIG) and have been so employed for approximately eighteen years. I am a graduate of the Federal Law Enforcement Training Center's Criminal Investigator Training Program, and I have attended law enforcement training courses on investigative methods and techniques.
- 2. As a U.S. DOT/OIG Special Agent, I investigate crimes involving grant fraud. During my tenure as a Special Agent, I have conducted and participated in numerous investigations relating to grant fraud. During the investigation of these cases, I have executed, or participated in, the execution of numerous search warrants and seized evidence of these violations.
- 3. The statements in this affidavit are based, in part, on my personal participation in this investigation, and my training and experience as a Special Agent with DOT/OIG. The statements contained in this affidavit are also based on information provided to me from other agents and investigators participating in this investigation including the NSF, the Department of Energy (DOE), the United States Department of Transportation (DOT), and the United States Department of Agriculture (USDA), and from my review of records and documents. Because this affidavit is being submitted for the limited purpose of establishing probable cause to secure a criminal complaint and arrest warrant, I have not included each and every fact known to me concerning this

investigation. I have set forth only the facts necessary and appropriate to establish probable cause for the requested criminal complaint and arrest warrant.

4. As detailed below, the Subjects collectively engaged in a scheme to defraud the federal government of federal research funds, by among other things: (1) fabricating letters of support and investment, (2) providing false information in research proposals and reports regarding business entities, business employees, business/research facilities, matching funds and investments; and (3) providing falsified reports and emails regarding how federal research funds were expended.

#### PROBABLE CAUSE

#### The Subjects

- 5. B.Wen and P. Zhang are husband and wife, and are naturalized citizens of the United States. H.Wen is the brother of B.Wen, and is also a naturalized citizen of the United States.
- 6. According to reports obtained from Experian Inc., Transunion, Equifax, and the law enforcement database CLEAR, as well as, mail covers conducted between May 2014 and June 2014, February 2015 and March 2015, and in December 2015, B.Wen and P.Zhang currently reside at 9807 Mill Run Drive, Great Falls, VA 22066, a residential property that they purchased on or about June 28, 2012. Between 2006 and 2012, B. Wen and P. Zhang lived at 8 Hunters Run, Horseheads, N.Y. 14845, a residential property that they owned.
- 7. According to credit reports obtained from Experian Inc., Transunion, Equifax, and the law enforcement database CLEAR, as well as, information obtained from the Washington State University (WSU) website, H.Wen has served as an Assistant

Professor in WSU's Department of Civil and Environmental Engineering since 2008, and serves as the Director, Washington Center for Asphalt Technology. The WSU website lists his current email address as <a href="mailto:historic">haifang wen@wsu.edu</a>, and surveillance conducted in December 2015 identified his office address as 405 Spokane Street, Sloan Hall Office 41, Pullman, WA 99164.

# **Small Business Set Aside Programs**

- 8. The Small Business Innovation Research Program ("SBIR") was established in 1982 as part of the Small Business Innovation Development Act, to financially support innovative small business concerns ("SBC") through federally funded research and development, and to increase competition, productivity and economic growth.
- 9. The Small Business Technology Transfer Program ("STTR") was established in 1992 as part of the Small Business Technology Transfer Act. The primary objective of the STTR program is to increase the incentive and opportunity for an SBC to undertake cutting-edge, high risk, high quality, scientific or engineering education or research with a high potential economic pay off if the research is successful.
- 10. The primary difference between the SBIR and STTR programs is that the STTR program requires a team approach, in which the SBC teams with a collaborating research institution (CRI), such as a university, and the CRI must receive a minimum of 30% of the award funds and perform a minimum of 30% of the research.
- 11. The Small Business Administration (SBA) oversees these programs, and issues policy directives applicable to all federal agencies that administer awards under these programs, setting forth all mandated eligibility criteria.

- 12. Each federal agency that participates in the SBIR/STTR programs issues its own solicitations and policies, which implement SBA's program criteria. In particular, the NSF, DOE and USDA issue SBIR/STTR awards through research grants.
- 13. The NSF requires that all SBIR and STTR proposals, interim and final reports be filed and submitted electronically through NSF's electronic submission system known as "FastLane." At all times relevant to this affidavit, the FastLane computer server was physically located in Arlington, Virginia. For future paragraphs of this affidavit that reference the submission of proposals, interim reports and final reports to the NSF, this paragraph is incorporated to reflect that all of those submissions were made electronically through NSF's FastLane System, as mandated.
- 14. The NSF personnel have official email addresses ending with the domain name of "@nsf.gov." At all relevant times, the NSF email addresses were hosted by an NSF email server physically located in Arlington, Virginia. For all future paragraphs of this affidavit that reflect email correspondence sent to or from NSF program personnel, this paragraph is incorporated to reflect that all emails with personnel at the NSF are sent by or received into an email server located in Arlington, Virginia.
- 15. The DOE requires that all proposals for SBIR funding be submitted electronically through an electronic submission system called "Grants.Gov." The DOE requires that all project reports be submitted electronically via email to the assigned program personnel. For all future paragraphs of this affidavit that reflect proposals or reports sent to or from the DOE program personnel, this paragraph is incorporated to reflect that proposals were filed electronically through Grants.Gov, and that reports were submitted electronically via email.

- 16. The USDA requires all SBIR proposals be submitted electronically through an electronic submission system called "Grants.gov." All project reports are submitted to USDA via an electronic submission system called Research, Extension, and Education Project Online Reporting Tool "REEport," formerly known as Current Research Information System "CRIS." For all future paragraphs of this affidavit that reflect proposals or reports sent to or from the USDA program personnel, this paragraph is incorporated to reflect that proposals were filed electronically through Grants.Gov, and that reports were submitted electronically via REEport/CRIS.
- 17. The federal government issues payments under the SBIR/STTR programs via electronic transfer. For example, NSF electronically requests payment through the Department of Treasury's Financial Management Service, located in Kansas City, MO. FMS then authorizes payment through a Federal Reserve Bank, and the money is transferred from the Federal Reserve Bank to the awardee's bank account.
- 18. SBIR and STTR awards are divided into the following applicable consecutive phases, and awardees cannot receive the next phase of an SBIR/STTR award without having successfully completed the earlier phase:
  - Phase I is a feasibility study to determine the suitability of research regarding a particular topic, and to determine whether the research project has sufficient technical merit for proceeding to Phase II. Phase I awards generally range between \$80,000 and \$150,000, require the grantee's adherence to applicable award conditions, and last between six and twelve months.
  - Phase IB represents a supplemental NSF funding opportunity intended to bridge the gap in time and financial resources between the Phase I and Phase II projects. To be eligible, the SBC grantee must obtain outside equity funding ranging, at all relevant times, from a minimum of \$40,000 to a maximum of \$100,000, for which NSF will provide a 50% match in funding to the outside investment. The maximum Phase IB supplement is \$50,000, which is added as a supplement to the initial Phase I award that extends the Phase I award period by up to six months.

- Phase II consists of expansion and development of the technology investigated in Phase I, typically lasts about two years, and is generally funded in an amount ranging between approximately \$300,000 and \$1,000,000.
- 19. Each SBIR/STTR proposal is required to designate a Principal Investigator (PI), who is responsible for the day-to-day oversight and operation of the SBIR/STTR award to the SBC.
- 20. Each SBIR/STTR proposal is required to be signed, dated and certified, with the SBC representing itself as meeting all eligibility criteria, and as having provided true and accurate information about the company throughout the proposal, to include, the company's size, personnel, anticipated budget, work plan, commercialization and outside investment information. Each federal agency relies upon the accuracy of certified proposal submissions to ensure that the SBC meets the eligibility criteria for the program, and also to evaluate the merits of the proposals.
- 21. Furthermore, each NSF proposal contains the following certification: "By signing and submitting this proposal, the Authorized Organizational Representative or Individual Applicant is: (1) certifying that statements made herein are true and complete to the best of his/her knowledge; and (2) agreeing to accept the obligation to comply with NSF award terms and conditions if an award is made as a result of this application ... Willful provision of false information in this application and its supporting documents or in reports required under an ensuing award is a criminal offense (U. S. Code, Title 18, Section 1001)."
- 22. The NSF also requires certified interim and final project reports, stating that the "work for which payment is hereby requested was done in accordance with the award terms and conditions" and that "willful provision of false information or concealing a

material fact in this report or any other communication submitted to NSF is a criminal offense."

23. The NSF requires Phase I SBIR/STTR grantees to attend mandatory inperson training during the Phase I award period, paid for by NSF Phase I grant funds, communicating program mandates in clear terms through written and oral presentations. Records of the SBIR and STTR Program show that both H. Wen and B. Wen attended the mandatory NSF Phase I SBIR/STTR Grantees Conference in Arlington, Virginia, between March 19 and March 21, 2008. This was a three day conference which provided Phase I grantees with information regarding SBIR/STTR program eligibility requirements, and the budgeting and accounting system requirements (including timekeeping) required of the NSF SBIR/STTR grantees. The program included a presentation by the NSF Office of Inspector General discussing the award criteria, associated certifications, and informing Phase I grantees of the criminal and civil consequences of providing false information to the NSF in proposals and reports, of misrepresenting eligibility criteria, and of using the grant funds for personal use and expenses not associated with the purpose of the underlying grant.

#### The SBCs Created By The Subjects

# United Environment and Energy, LLC ("UEE")

24. According to corporate records obtained from the Division of Corporations, New York State Department of State (NYSDOS), and records obtained from the law enforcement database CLEAR by Thomson Reuters, United Environment and Energy, LLC ("UEE"), was incorporated on or about December 16, 2003, by P.Zhang, who signed the Articles of Organization, as President, UEE, and has been physically located at 111 Ridge Road, Horseheads, NY 14845 since December 12, 2007.

- 25. According to mandatory limited liability biennial statements filed by P.Zhang in or about December 2007, December 2009, December 2011, December 2013, and December 2015, the address for service of process for UEE has been 111 Ridge Road, Horseheads, N.Y. 14845.
- 26. According to grant and/or contract records maintained by the NSF, DOT, USDA and DOE, P.Zhang is UEE's President, and B.Wen is UEE's Chief Scientist and Vice President.
- 27. Bank accounts associated to UEE were opened by P.Zhang and/or B.Wen using the business addresses of either: 8 Hunter's Run, Horseheads, NY 14845; 111 Ridge Road, Horseheads, NY 14845; or 701A Chemung Street, Horseheads, NY 14845.
- 28. As detailed more throughout this affidavit, we have established that at least the following 27 UEE proposals and/or related reports and correspondence, contained false statements and/or fabricated documents:

|                  |        |         |      |       | Award       |
|------------------|--------|---------|------|-------|-------------|
| Contract Number  | Agency | Program | Year | Phase | Amount      |
| DE-SC0008207     | DOE    | SBIR    | 2013 | 2     | \$1,009,669 |
| DE-SC0008207     | DOE    | SBIR    | 2012 | 1     | \$149,819   |
| DE-SC0004621     | DOE    | SBIR    | 2011 | 2     | \$999,968   |
| DE-SC0003404     | DOE    | SBIR    | 2010 | 1     | \$149,990   |
| DE-SC0004621     | DOE    | SBIR    | 2010 | 1     | \$99,890    |
| DE-SC0003404     | DOE    | SBIR    | 2010 | 2     | \$999,988   |
| DE-FG02-         |        |         |      |       |             |
| 08ER85081        | DOE    | SBIR    | 2009 | 2     | \$749,931   |
| DE-FG02-         |        | •       | ·    |       | ·           |
| 07ER84797        | DOE    | SBIR    | 2008 | 2     | \$749,632   |
| DE-FG02-         |        |         |      | _     | ****        |
| 08ER85081        | DOE    | SBIR    | 2008 | 1     | \$100,000   |
| DE-FG02-         | DOE    | com     | 2007 | ar .  | #100.000    |
| 07ER84797        | DOE    | SBIR    | 2007 | 1     | \$100,000   |
| 1240215          | NSF    | STTR    | 2012 | 2REU  | \$15,971    |
| 1127426          | NSF    | STTR    | 2011 | 2     | \$447,667   |
| 0956737          | NSF    | SBIR    | 2010 | 2     | \$413,505   |
| 0848605          | NSF    | SBIR    | 2009 | 2     | \$499,989   |
| 0930629          | NSF    | STTR    | 2009 | 1     | \$150,000   |
| 0833792          | NSF    | STTR    | 2008 | 1B    | \$50,000    |
| 0738266          | NSF    | SBIR    | 2008 | . 1   | \$100,000   |
| 0902852          | NSF    | SBIR    | 2008 | 1B    | \$50,000    |
| 0810670          | NSF    | SBIR    | 2008 | 1     | \$100,000   |
| 1039462          | NSF    | SBIR    | 2008 | 2B    | \$174,881   |
| 0822738          | NSF    | SBIR    | 2008 | 2     | \$500,000   |
| 0802702          | NSF    | SBIR    | 2008 | 1B    | \$50,000    |
| 0711939          | NSF    | SBIR    | 2007 | 1     | \$100,000   |
| 2013-33610-21084 | USDA   | SBIR    | 2013 | 1     | \$80,000    |
| 2010-33610-20887 | USDA   | SBIR    | 2010 | 1     | \$90,000    |
| 2010-33610-21358 | USDA   | SBIR    | 2010 | 2     | \$400,000   |
| 2008-33610-18914 | USDA   | SBIR    | 2008 | 1     | \$80,000    |
| Total            | :      |         |      |       | \$8,410,900 |

29. As a SBC, UEE has received approximately \$8.8 million of small business set aside research funds. In addition, UEE obtained funding as a subcontractor on at least one federal research grant through WSU under the direction of H.Wen, the brother of B. Wen, and over \$2 million of funding from the New York State Energy and Research Development Authority ("NYSERDA").

- 30. For each of the funded SBIR and STTR research proposals to UEE, either P.Zhang or B.Wen was listed as the proposed PI, that is the individual responsible for the daily oversight of the proposed project, and approximately ten other individuals were represented as being employed by UEE at different times, including Colleen Costello, James Burlitch and Scott Cicora.
- 31. Based upon records obtained from the New York State Department of Labor, Scott Cicora was not employed by UEE from 2010 to the present, as represented in multiple federal proposals filed by UEE. Further, James Burlitch is only listed as employed by UEE from the third quarter of 2009 through the third quarter of 2012. Colleen Costello is listed as employed by UEE from 2007 through the third quarter of 2012.
- 32. According to the grant records maintained by the NSF, DOE, and USDA, Colleen Costello was budgeted to receive in excess of \$100,000 in UEE salary for work on federally-funded projects between 2010 and the present. Based upon records obtained from the New York Department of Labor, UEE reported that Costello received \$13,200 of salary in this timeframe. Based upon a review of records from the law enforcement database CLEAR by Thomson Reuters, Colleen Costello has lived in Chicago, IL since approximately 2001. Her online publically available LinkedIn.com profile lists her employers as Unilever from 2003 to 2007 and Honeywell from January 2008 to the present. Her LinkedIn profile contained no mention of UEE.
- 33. According to grant records maintained by the NSF, DOE, and USDA, James Burlitch was budgeted to receive in excess of \$163,000 in UEE salary for work on federally-funded projects between 2010 and the present. Based upon records obtained from the New York Department of Labor, UEE reported that Burlitch received \$11,000 of salary in this timeframe. Based upon a review of records from the law enforcement database CLEAR by

Thomson Reuters, James Burlitch has lived in Ithaca, NY since at least 2001. His online publically available LinkedIn.com profile lists his employers as Cornell University from 1965 to 2004 and Enduring Images from 2004 to the present. His LinkedIn profile contained no mention of UEE.

34. According to the grant records maintained by the NSF, DOE, and USDA, Scott Cicora was budgeted to receive in excess of \$71,000 in UEE salary for work on federally-funded projects between 2010 and the present. Based upon records obtained from the New York Department of Labor, UEE made no reference to Cicora, and the records show no salary for Cicora in this timeframe. Based upon a review of records from the law enforcement database CLEAR by Thomson Reuters, Scott Cicora has lived in Mount Airy, MD, Webster, NY, and/or Fort Mitchell, AL since 2007. His online publically available LinkedIn.com profile lists his employers as Conserval Systems from October 2005 to December 2006, Fat Spaniel Technologies from December 2006 to April 2010, and Enphase Energy from April 2010 to the present. His LinkedIn profile contained no mention of UEE.

# Advanced Engineering Research, LLC ("AER")

35. According to public information provided by the Wisconsin Department of Financial Institutions, business bank records provided by Wells Fargo, and records obtained from the law enforcement database CLEAR by Thomson Reuters, Advanced Engineering Research, LLC ("AER") was formed by H.Wen in or around October 2005 in the State of Wisconsin, as a Domestic Limited Liability Company created to perform engineering consulting. When initially formed, AER listed its principal office at 221 S. High Point Road, 302E, Madison, WI. According to bank records from Wells Fargo Bank, N.A., H.Wen opened a business bank account in the State of Wisconsin, as the only signatory for

AER on February 2, 2006. AER subsequently reported its business address as 425 W. Willow Court, Suite 248, Milwaukee, Wisconsin 53217-2667. Both of these Wisconsin addresses listed as AER's company address were H.Wen's previous residential addresses.

36. According to grant records maintained by the NSF, H.Wen served as the President of AER, and submitted the following three proposals, all awarded and entitled "Develop an Autonomic-Healing Hot Mix Asphalt." Keh Tsao was the purported PI on all three projects.

| Proposal Number | Submission Date | Phase | Awarded Amount |
|-----------------|-----------------|-------|----------------|
| IIP-0740050     | 06/12/2007      | I     | \$99,015       |
| IIP-0833863     | 04/14/2008      | IB    | \$49,482       |
| IIP-0848986     | 07/31/2008      | II    | \$468,494      |

37. According to records obtained from the law enforcement database CLEAR by Thomson Reuters, the WSU website, and multiple federal proposals filed with the NSF, USDA and DOT, between 2008 and 2011, H.Wen, submitted at least one federal research proposal through WSU in which he represented that UEE was a subcontractor, and further represented that he does not have any financial interest/stake/partnership with UEE, LLC. This representation is contrary to multiple letters of support and investment provided to UEE from AER, in which it was represented that H. Wen and AER had a financial interest in UEE. In addition, for at least one STTR Phase II award to UEE, WSU serves as a subcontractor for the award, with H.Wen serving as Co-PI.

#### KEW Technologies, Inc. ("KEW")

- 38. According to NYSDOS records, KEW Technologies, Inc. ("KEW") was formed in or around April 2015 by B.Wen, who filed a Certificate of Incorporation for KEW in the State of New York, and listed 100 North Main Street, Suite 316, Elmira, N.Y. 14901 as the company address for purposes of service of process.
- 39. According to grant records obtained from the NSF, DOE and USDA, KEW submitted the following four proposals for federal SBIR funding in 2015: (1) Phase I Proposal to the DOE entitled, "Cost-effective Production of C8+ Hydrocarbons from Biogas" for \$154,988, submitted in October 2015; (2) Phase I Proposal to the DOE entitled, "A Novel Catalytic System for Selective Oxidation of Shale Gas with Oxygen," for \$154,997, submitted in October 2015; (3) Phase I Proposal entitled "An Energy Storage Technology for Wind and Solar Power," for \$99,812, submitted to the USDA in October 2015; and (4) Phase I Proposal No. 1621995, entitled Innovative and Affordable Building Coating Material, for \$225,000, submitted in December 2015 submitted to the NSF. These proposals are pending.
- 40. All four of these proposals list the address for KEW as 100 North Main Street, Suite 316, Elmira, N.Y. 14901, and the DOE proposals list B.Wen, Chief Operating Officer, PI; P.Zhang, Chief Technology Officer; Colleen Costello, Project Quality Manager; and James Burlitch, Sr. Research Fellow, as Senior Personnel, and also list two additional employees in the proposals, Michelle Dan, Laboratory Manager of KEW and Randy Withey, Technician of KEW. The NSF Proposal lists P.Zhang as Chief Technology Officer and PI, and includes Colleen Costello and James Burlitch on the proposed budget.

41. Based upon public records and records obtained by the law enforcement database CLEAR by Thomson Reuters, Colleen Costello and James Burlitch are not employees of KEW as represented in these federal proposals filed by KEW.

#### The Subjects' Sham Investment Companies

- 42. According to multiple proposals filed with the NSF, DOE, and USDA, the Subjects through AER and UEE misrepresented to the federal government that three independent companies, Advanced Technologies and Materials, LLC ("ATM"), National Technology Development LLC ("NTD") and Renewable Materials, LLC ("RM") had made or would make investments into AER and/or UEE, or would serve as subcontractors for AER and/or UEE for certain federal projects. With many of these proposals, the Subjects provided letters of support from ATM, NTD and RM, confirming their intent to invest in AER and/or UEE. Further during the course of a Phase II NSF award No. 0848986 to AER, NTD was represented as an independent subcontractor to be paid with NSF award funds to perform work for the NSF project.
- 43. As referenced above, both B.Wen and H.Wen attended the March 2008 NSF SBIR Grantees Conference. At that conference, NSF made a presentation on Phase IB supplemental awards, which are based upon outside third-party investments. The presentation specifically stated that in-kind, loans, and self-funding are not acceptable forms of investment that qualify companies to receive Phase IB awards.

#### Advanced Technologies and Materials, LLC ("ATM")

44. According to records obtained from the NYSDOS, including the Articles of Organization and Articles of Dissolution, both signed by B.Wen, ATM was formed on or

about December 4, 2007, dissolved on October 6, 2011. The two addresses provided by B.Wen for ATM in the NYSDOS records were 8 Hunters Run, Horseheads, NY 14845, which also was a previous residential address for B.Wen and P.Zhang, and 111 Ridge Road, Horseheads, NY 14845, the business address of UEE.

- 45. According to business bank records received from HSBC, specifically a Corporate Board Resolution identifying B.Wen as the Owner/Principal of ATM, and P.Zhang as a principal of ATM, signed by B.Wen on September 27, 2010, ATM (Taxpayer ID No. 262717703) was located at 111 Ridge Road, Horseheads, NY 14845.
- 46. According to grant records maintained by the NSF, DOE, and USDA, ATM was represented in proposals and/or reports submitted by the Subjects through AER and/or UEE, as an investor in federally funded projects, some of which included letters of support from George Wen, Jessica Song, and Kelly Niu. It is believed that George Wen has a family relationship to B.Wen and H.Wen. Based upon a review of public records and records obtained from the law enforcement database CLEAR by Thomson Reuters, there is no indication that Jessica Song or Kelly Niu exist, or have any affiliation with ATM.
- 47. According to our review of ATM's HSBC Bank Account 327250712, the "investments" reported to the DOE as related to ATM, were not made.
- 48. For all of the NSF Phase IB proposals submitted by AER and UEE, even if funds were transferred to AER or UEE, ATM was not an eligible outside investor as set forth in the NSF Phase IB Dear Colleague Letter providing that "eligible outside funding consists of investment from industrial partners, venture capitalists, angel investors, and non-SBIR/STTR grants and contracts from State and Federal Governments," and further addressed in written and oral presentations at the March 2008 Grantees Conference attended by both B.Wen and H.Wen, and in the September 2008 Grantees Conference

attended by B.Wen, explicitly stating that in-kind, loans, and self-funding are not acceptable forms of investment that qualify companies to receive Phase IB awards.

# National Technology Development, LLC ("NTD")

- 49. According to the Articles of Organization electronically signed by H.Wen, obtained from the NYSDOS, National Technology Development LLC ("NTD") was formed in New York State on or around May 2, 2007, as a domestic limited liability company located at 701 Chemung Street, Suite A, Horseheads, NY 14845, and NTD is currently an active business.
- 50. According to NYSDOL records, H.Wen registered NTD in the state of New York on January 23, 2008 and identified himself as NTD's President and sole employee. NTD's mailing address, physical address, and books/records address were listed as 8 Hunters Run, Horseheads, NY 14845, and at the time, the residential address of B.Wen and P.Zhang.
- 51. According to NTD bank records received from Chase Bank, to include the signature card, a business bank account was opened by H.Wen for NTD in New York State, and designates the home address of B.Wen and P.Zhang at 8 Hunters Run, Horseheads, NY 14845, with H.Wen being the only signatory as noted on the signature card, dated December 3, 2007.
- 52. According to grant records maintained by the NSF, DOE, and USDA, NTD was represented in proposals and/or reports filed by AER and UEE as either the investor or subcontractor for research projects, as further represented in letters of support from Thomas Lou. Based upon a review of public records, and records obtained from the law

enforcement database CLEAR by Thomson Reuters, there is no indication that Thomas Lou exists, or has any affiliation with NTD.

53. According to our review of bank records, "investments" represented to the federal government as related to NTD, were not made or not made in their entirety. Even if funds were transferred pursuant to grant proposals through AER or UEE, NTD was not an eligible outside investment as set forth in the Phase IB Dear Colleague Letter providing that "eligible outside funding consists of investment from industrial partners, venture capitalists, angel investors, and non-SBIR/STTR grants and contracts from State and Federal Governments," and further addressed in written and oral presentations at the March 2008 Grantees Conference attended by both B.Wen and H.Wen, and in the September 2008 Grantees Conference attended by B.Wen, explicitly stating that in-kind, loans, and self-funding are not acceptable forms of investment that qualify companies to receive Phase IB awards. Further, according to our review of bank records and corporate records, AER did not pay out the full \$121,368 to NTD for a purported subcontract, as H.Wen had represented to NSF, and the amount transferred from AER to NTD was not for a subcontract with an independent entity as represented to NSF.

#### Renewable Materials, LLC ("RM")

54. According to corporate records obtained from the NYSDOS, to include the Articles of Organization and Articles of Dissolution both signed by B.Wen, Renewable Materials, LLC ("RM") was formed in New York State on or around August 20, 2010, as a domestic limited liability company, with an address of 111 Ridge Road, Suite C, Horseheads, NY 14845, which was dissolved on March 27, 2014.

- 55. Based upon a review of New York Department of Labor Records for RM, B.Wen reported himself as the only employee of RM in 2012 and 2013. These records further reflect that B.Wen received \$120,000 in wages from RM during the fourth quarter of 2012 and \$50,000 in wages from RM in the fourth quarter of 2013, and that RM suspended its business, and ceased paying wages in December 2013. On the "Quarterly Combined Withholding, Wage Reporting and Unemployment Insurance Return" forms filed for RM in the last quarter of 2012, and all four quarters of 2013, B.Wen was listed as the Taxpayer/Paid preparer and as the submitter.
- 56. According to business bank records received from Chemung Canal Trust Company in Elmira, NY, B.Wen opened a business bank account in New York State for RM, that is, a checking account on or about November 30, 2011, showing B.Wen as the only authorized signatory, with a business address of 8 Hunters Run, Horseheads, NY 14845. Pursuant to a Limited Liability Company Authorization Resolution signed by B.Wen on November 30, 2011, RM was listed with an address of 8 Hunters Run, Horseheads, NY 14845, designating B.Wen as the "sole owner" of RM.
- 57. According to business bank records received from Chemung Canal Trust Company, B.Wen opened a savings account for RM on or about January 5, 2012, designating B.Wen as the sole account signatory, and the business address for RM to be his then home address of 8 Hunters Run, Horseheads, NY 14845. The savings account was opened and funded with a bank check, No. 101486794, dated December 28, 2011, from HSBC in the amount of \$98,560.00, a UEE business bank account.
- 58. According to monthly bank statements received from Chemung Canal Trust Company, RM bank statements were provided to RM at 8 Hunters Run, Horseheads, NY 14845 through July 2012, but starting in August 2012, the address listed on the RM monthly

bank statements for the company was 9807 Mill Run Drive, Great Falls, VA 22066, the residential property owned by B.Wen and P.Zhang.

59. According to grant records maintained by the DOE, RM was represented in a proposal filed by the Subjects through UEE as an investor in a federally-funded project, which included a letter of support, dated March 25, 2013, from Pam Zhang, Managing Member. Based upon a review of public records and records obtained from the law enforcement database CLEAR by Thomson Reuters and the New York Department of Labor, there is no indication that Pam Zhang existed or was affiliated with RM.

# The UEE Grant Proposals - False Statements

60. In or about and between 2007 and 2013, UEE received thirteen (13) SBIR/STTR research grant awards from the NSF, totaling over \$2.6 million, ten (10) SBIR awards from the DOE, totaling more than \$5 million, and four (4) SBIR awards from the USDA, totaling approximately \$650,000. In the UEE proposals to the NSF, DOE and the USDA, the corporate address for UEE was listed as 111 Ridge Road, Horseheads, NY 14845.

#### The NSF Awards

61. Included in the NSF awards were three Phase IB matching awards, in which B. Wen and P. Zhang represented through UEE that the following mandatory outside investments were to be made by ATM and NTD, companies formed by B.Wen and H.Wen.

| Project No. | Date             | Purported Investor           | Purported<br>Investment |
|-------------|------------------|------------------------------|-------------------------|
| 0802702     | October 14, 2007 | NTD, signed by<br>Thomas Lou | \$100,000               |
| 0833792     | April 14, 2008   | NTD, signed by<br>Thomas Lou | \$100,000               |
| 0902852     | October 15, 2008 | ATM, signed by<br>Kelly Niu  | \$100,000               |

- 62. In all of the proposals, B.Wen and P.Zhang represented that UEE operated out of 111 Ridge Road, Horseheads, New York 14845, and that the primary place of performance would be at the same address.
- 63. All of the NSF payments to UEE went to bank accounts held by the company at HSBC, Bank of America, and Chemung Canal Trust Company (who acquired the Bank of America accounts in 2013). Each of these accounts was registered to UEE in Horseheads, New York.
- 64. In the UEE proposals to the NSF, two included mandatory subcontracts to H.Wen at WSU; and one included a letter of support from AER.

| Project No. | Date       | Subcontract or    | Subcontract |
|-------------|------------|-------------------|-------------|
|             | •          | Letter of Support | Amount      |
| 0711939     | 12/04/2006 | Letter of Support | N/A         |
| 0930629     | 02/25/2009 | Subcontract       | \$45,038    |
| 1127426     | 01/31/2011 | Subcontract       | \$150,000   |

65. According to the NSF records and databases, B.Wen registered for at least three different mandatory Phase I SBIR/STTR grantee conferences for each of his Phase I awards, in: March 2008 (also attended by H.Wen), September 2008, and March 2010.

#### False Investment Representations for Phase IB Award No. 0802702

- 66. On October 14, 2007, P.Zhang submitted Phase IB Proposal No. 0802702 to NSF for \$50,000 in matching funds to support and extend a UEE SBIR Phase I project: "High Efficiency Low Cost Nitrogen Fertilizer Production from Fly Ash."
- 67. The proposal included a letter of support and investment from Thomas Lou, Vice President of NTD, located at 8 Hunters Run, Horseheads, NY 14845. The letter stated that NTD agreed to fund UEE for the project in the sum of \$100,000, in exchange for 5% ownership of the technology developed, with \$40,000 being transferred to UEE's bank account by electronic transfer on January 1, 2008, and \$60,000 being transferred to UEE's bank account by electronic transfer on March 1, 2008.
- 68. Based upon a review of NYSDOS records for NTD, public records, and records obtained from the law enforcement database CLEAR by Thomson Reuters, there is no indication that Thomas Lou exists, or had any affiliation with NTD.
- 69. Based upon a review of NYSDOS records associated with NTD, NTD's bank records obtained from Chase Bank, and records obtained from the law enforcement database CLEAR by Thomson Reuters, NTD was formed by H.Wen, and NTD's bank account was created and controlled by H.Wen.
- 70. Based upon a review of NTD and UEE's bank records, NTD check number 1001, drawn from an account at JPMorgan Chase for \$10,000, was deposited into UEE's account on March 3, 2008. No additional NTD funds were transferred to UEE during the Phase IB Award period.
- 71. Further, any funds transferred between NTD and UEE did not meet the definition and requirements of an eligible outside investment, as set forth in the NSF Phase IB Dear Colleague Letter, providing that "eligible outside funding consists of investment

from industrial partners, venture capitalists, angel investors, and non-SBIR/STTR grants and contracts from State and Federal Governments," and further addressed in written and oral presentations at the March 2008 Grantees Conference attended by both B.Wen and H.Wen, in the September 2008 Grantees Conference attended by B.Wen, explicitly stating that in-kind loans, and self-funding are not acceptable forms of investment that qualify companies to receive Phase IB Awards.

### False Investment Representations for Phase IB Award No. 0833792

- 72. On April 14, 2008, B.Wen submitted Phase IB proposal No. 0833792 to the NSF for \$50,000 in matching funds to support and extend the UEE SBIR Phase I project: "Heterogeneous Catalytic System for Biodiesel Production from Alaska Fish Oil." B.Wen listed UEE's address as 111 Ridge Road, Horseheads, NY 14854.
- 73. The proposal included a letter of support and investment from Thomas Lou, Vice President of NTD, located at 8 Hunters Run, Horseheads, NY 14845. The letter stated that NTD agreed to fund UEE for the project in the sum of \$100,000: \$30,000 through electronic transfer on June 1, 2008, and \$70,000 on September 1, 2008.
- 74. In email exchanges on or about and between May 13, 2008 and May 19, 2008, between P.Zhang and NSF PO Cynthia Znati, P.Zhang responded to inquiries from NSF PO Znati, providing NSF with a revised letter of support from NTD, and notifying the NSF PO that the "8% of the ownership of the technology" referenced in NTD's letter means that "if this technology gets commercialized and brings profit for our company, NTD would take 8% of the profit because they will have 8% ownership of the technology. It IS NOT 8% of the company." [emphasis in the original]

- 75. Based upon a review of NYSDOS records for NTD, public records, and records obtained from the law enforcement database CLEAR by Thomson Reuters, there is no indication that Thomas Lou exists, or has any affiliation with NTD. These same records establish that H.Wen formed NTD, and that H.Wen created and controlled NTD's bank account.
- 76. According to a review of bank records, UEE deposited \$20,000 of NTD funds on July 1, 2008, and received a \$35,000 wire transfer from NTD on November 18, 2008. No additional NTD funds were transferred to UEE during the Phase IB Award period.
- 77. Further, any funds transferred between NTD and UEE did not meet the definition and requirements of an eligible outside investment, as set forth in the NSF Phase IB Dear Colleague Letter, providing that "eligible outside funding consists of investment from industrial partners, venture capitalists, angel investors, and non-SBIR/STTR grants and contracts from State and Federal Governments," and further addressed in written and oral presentations at the March 2008 Grantees Conference attended by both B.Wen and H.Wen, in the September 2008 Grantees Conference attended by B.Wen, explicitly stating that in-kind loans, and self-funding are not acceptable forms of investment that qualify companies to receive Phase IB Awards.

# False Investment Representations for Phase IB Award No. 0902852

78. On October 15, 2008, P.Zhang submitted Phase IB proposal No. 0902852 to NSF for \$50,000 in matching funds to support and extend a UEE SBIR Phase I project: "Continuous Flow fixed-bed Biodiesel Production from Algae Oil." P.Zhang provided UEE's address as 111 Ridge Road, Horseheads, NY 14854.

- 79. The proposal included a letter of support and investment from Kelly Niu, Vice President, ATM, located at 8 Hunters Run, Horseheads, NY 14845, which had been the same address listed for and associated with the NTD investment letter. The letter stated that ATM agreed to fund UEE for the project in the sum of \$100,000 beginning on February 1, 2009, to be transferred by electronic transfer in one lump sum of \$100,000 on May 1, 2009.
- 80. According to credit reports obtained from Experian Inc., Transunion and Equifax, and records obtained from the law enforcement database CLEAR by Thomson Reuters, the address listed on the ATM letter of support, 8 Hunters Run, Horseheads, NY 14845, was the residential address for B.Wen and P.Zhang between approximately 2006 and 2012.
- 81. In email exchanges on or about October 27, 2008, the NSF PO Cynthia Znati using the email address of cznati@nsf.gov, wrote to B.Wen:

... I have some questions about your third party funds. Why is the payment not being made until May 1, 2009, and why is the investment not starting until February 1, 2009? The Phase IB will start on Jan 1, 2009. At least some of the investment funds must be transferred by the start date and there must be a firm date on the remaining funds.

#### 82. On October 27, 2008, B. Wen replied:

The reason for the May 1 transfer is for their accounting convenience. I just talked with them regarding this matter (your concern) and they have no problem to transfer the money earlier. They agreed to transfer \$50,000 by Jan 1, 2009 and the remaining on May 1.

- B.Wen then provided an updated letter from ATM to that effect, dated October 27, 2008, allegedly signed by Vice President, Kelly Niu.
- 83. Based upon a review of UEE's bank records, public records, and records obtained from the law enforcement database CLEAR by Thomson Reuters, there is no indication that Kelly Niu exists, or had any affiliation with ATM. Based upon a review of

NYSDOS records and records obtained from the law enforcement database CLEAR by Thomson Reuters, ATM was formed on or about December 4, 2007, by B.Wen, who signed as President. In corporate records filed by B.Wen, he listed two addresses for ATM, 111 Ridge Road, Horseheads, NY 14845 and 8 Hunters Run, Horseheads, NY 14845.

- 84. Following the email exchanges noted above, ATM did not invest \$100,000 of its own money into UEE during the Phase IB Award period, as mandated by and represented to NSF.
- 85. Further, any funds transferred between ATM and UEE did not meet the definition and requirements of an eligible outside investment as set forth in the NSF Phase IB Dear Colleague Letter, providing that "eligible outside funding consists of investment from industrial partners, venture capitalists, angel investors, and non-SBIR/STTR grants and contracts from State and Federal Governments," and further addressed in written and oral presentations at the March 2008 Grantees Conference attended by both B.Wen and H.Wen, in in the September 2008 Grantees Conference attended by B.Wen, explicitly stating that in-kind loans, and self-funding are not acceptable forms of investment that qualify companies to receive Phase IB Awards.
- 86. In the corresponding Phase II proposals submitted by B. Wen and/or P. Zhang, following each one of the above-referenced Phase IB awards, UEE asserted that the mandatory investments NTD ATM. respectively, from and were received. Specifically, following NSF IB award no. 08027092, UEE submitted NSF Phase II Proposal No. 0822738 on January 30, 2008, it was awarded on July 16, 2008, and UEE by either B. Wen or P. Zhang submitted its final project report to NSF on March 1, 2011. Specifically, following Phase IB Award No. 0833792, UEE submitted NSF Phase II Proposal No. 0848605 on July 31, 2008, it was awarded on March 3, 2009, and UEE by

either B. Wen or P. Zhang submitted its final report to NSF on December 30, 2010. Specifically, following NSF Phase IB Award No. 0902852, UEE submitted NSF Phase II Proposal No. 0956737 to NSF July 28, 2009, it was awarded on April 7, 2010, and UEE by either B. Wen or P. Zhang submitted its final project report on March 2, 2012. Based upon a review of bank records for UEE, NTD and ATM, the investments represented to the federal government as coming into UEE from ATM and NTD were not received in their entirety by UEE as mandated and represented to NSF, and any funds received by UEE from ATM and NTD did not meet the definition and requirements of an eligible outside investment, as set forth in the NSF Phase IB Dear Colleague Letter, providing that "eligible outside funding consists of investment from industrial partners, venture capitalists, angel investors, and non-SBIR/STTR grants and contracts from State and Federal Governments," and further addressed in written and oral presentations at the March 2008 Grantees Conference attended by both B.Wen and H.Wen, in in the September 2008 Grantees Conference attended by B.Wen, explicitly stating that in-kind loans, and selffunding are not acceptable forms of investment that qualify companies to receive Phase IB Awards.

87. False statements have been identified in the remaining NSF awards not described above. These proposals included either misrepresentations regarding the involvement or company role of Colleen Costello, Scott Cicora, and/or James Burlitch, and/or a false representation of revenue from NTD or ATM. Moreover, several of these proposals resulted in Phase II awards or supplements, which would not have been awarded had the NSF been aware of false statements submitted in preceding phases.

| Project No. | Date     | <b>Employees Misrepresented</b>  | Other Misrepresentation  |
|-------------|----------|--|--|
| 0738266     | 05/24/07 | Costello – Her employment at<br>Unilever was omitted from her<br>bio and her stated UEE role<br>was inaccurate |  |
| 0810670     | 12/04/07 | Costello – Her employment at<br>Unilever was omitted from her<br>bio and her stated UEE role<br>was inaccurate |  |
| 0822738     | 01/30/08 | Cicora – Per NYSDOL<br>records, he was never an<br>employee of UEE   | Multiple false representations regarding NTD's investment of \$100,000 under preceding Phase IB award 0802702      |
| 0848605     | 07/31/08 | Cicora – Per NYSDOL<br>records, he was never an<br>employee of UEE   | Multiple false representations regarding NTD's investment of \$100,000 under preceding Phase IB award 0833792      |
| 0956737     | 07/28/09 | Cicora – Per NYSDOL<br>records, he was never an<br>employee of UEE   | Multiple false representations regarding ATM's investment of \$100,000 under preceding Phase IB award 0902852      |
| 1039462     | 04/19/10 | Cicora – Per NYSDOL<br>records, he was never an<br>employee of UEE   | Supplemental award based off of<br>Phase II award 0822738, which<br>contained false representations<br>noted above |
| 1240215     | 03/28/12 |  | Supplemental award based off of<br>Phase II award 1127426, which<br>contained false representations                |

| <br> |             |
|------|-------------|
|      | noted above |

# The DOE Awards

88. In or about and between 2007 and 2014, all of UEE's Phase II SBIR proposals to the DOE included letters of support and investment, four from ATM, two from AER/H.Wen, one from NTD, and one from RM.

| Award No.             | Proposal Date  | Purported | Letter of  | Promised  |
|-----------------------|----------------|-----------|--|---|
|                       |                | Investor  | Support  | Investment/Subcontract  |
| DE-<br>SC0008207      | April 17, 2013 | RM        | Pam Zhang,<br>Managing<br>Member,<br>dated March<br>25, 2013 | \$500,000 Investment, to<br>begin on February 1,<br>2016, contingent on<br>UEE receiving Phase II<br>funding and achieving<br>Phase II goals. |
| DE-<br>SC0004621      | March 31, 2011 | ATM       | George Wen,<br>Executive VP,<br>dated March 8,<br>2011       | \$500,000 Investment  |
| DE-<br>SC0003404      | June 7, 2010   | ATM       | George Wen, Executive VP, dated June 1, 2010                 | \$250,000 Investment  |
| DE-FG02-<br>08ER85081 | April 17, 2009 | ATM       | Jessica Song, Sr. VP, dated March 26, 2009                   | \$200,000 Investment:<br>\$100,000 on 1/1/10<br>\$100,000 on 1/1/11   |

|                       |                | AER | Harry Wen,<br>President, dated<br>March 9, 2009  | \$400,000 4 annual installments of \$100,000 beginning on 10/1/11 |
|-----------------------|----------------|-----|--|---|
| DE-FG02-<br>07ER84797 | April 14, 2008 | ATM | Jessica Song VP, dated April 7, 2008             | \$200,000 Investment  |
|                       |                | NTD | Thomas Lou                                       | \$400,000 Investment  |
|                       |                | AER | Harry Wen,<br>President, dated<br>March 10, 2008 | \$30,000 Subcontract  |

- 89. As set forth previously in this affidavit, ATM and RM were formed by B.Wen, and NTD was formed by H.Wen, with each opening and controlling associated bank accounts.
- 90. Based upon a review of the bank records for UEE, AER, ATM, RM and NTD, within the time frames in which research grant awards were funded, the promised investments were not made into UEE from AER, ATM, and NTD. Moreover, RM was dissolved by B.Wen prior to the date that RM was to begin making its purported \$500,000 investment into UEE.
- 91. On or about May 1, 2013, the DOE issued an award to UEE, pursuant to Grant No. DE-SC0008207, under the direction of B.Wen. That award closed on August 13, 2015. B.Wen submitted two interim progress reports and one final project report to DOE

on April 30, 2014, October 31, 2014, and in or around August 2015, all identifying the address for UEE as 111 Ridge Road, Horseheads, NY 14845. In the second interim report, B.Wen reported that the total cost for the interim reporting period for the project to be \$354,787, reporting the total cumulative project costs as \$532,763, and identified anticipated milestones for the period of November 2014 – August 2015.

#### The USDA Awards

92. In or about and between 2007 and 2014, all of UEE's SBIR proposals to the USDA included either misstatements regarding the involvement or company role of Colleen Costello, Scott Cicora, and/or James Burlitch, a false representation of revenue from NTD, or a letter of commitment from AER purportedly signed by Thomas Lou.

| Award No.        | Proposal Date      | Employees                | Other Misrepresentation  |
|------------------|--------------------|--------------------------|--------------------------|
|                  |                    | Misrepresented           |                          |
|                  | September 13, 2012 | Costello – Per NYSDOL    |                          |
|                  |                    | records, she was not     |                          |
|                  |                    | listed as an employee of |                          |
|                  |                    | UEE throughout the       |                          |
| 2013-33610-21084 |                    | entirety of the award    |                          |
|                  | September 3, 2009  | Cicora – Per NYSDOL      | Made false               |
|                  |                    | records, he was never an | representation regarding |
|                  |                    | employee of UEE          | \$200,000 revenue from   |
|                  |                    |                          | NTD related to NSF       |
| 2010-33610-20887 |                    |                          | projects                 |
|                  | February 4, 2010   | Cicora – Per NYSDOL      |                          |
|                  |                    | records, he was never an |                          |
|                  |                    | employee of UEE; and,    |                          |
|                  |                    | Burlitch – Per NYSDOL    |                          |
|                  |                    | records, he did not      |                          |
|                  |                    | receive the full amount  |                          |
| 2010-33610-21358 |                    | budgeted                 |                          |
|                  | September 3, 2007  |                          | Made false               |
|                  |                    |                          | representation in the    |
|                  |                    |                          | letter of support        |
| 2008-33610-18914 |                    |                          | purportedly from         |

| · |   | Thomas Lou, who does      |
|---|---|---------------------------|
|   |   | not appear to exist, or   |
|   | · | have any affiliation with |
|   |   | AER                       |

93. According to records obtained from the law enforcement database CLEAR by Thomson Reuters, and publically available information on LinkedIn.com, Costello was employed at Honeywell from 2008 to the present, and has lived in Chicago since approximately 2001; Cicora has worked for various companies since 2005, none of which are UEE or KEW, and has lived in various states since 2007; and, Burlitch appears to have retired from Cornell University in 2004 after approximately 39 years and has since taken up photography for a New York company called Enduring Images.

# H.Wen's AER Grant Proposals

- 94. On June 12, 2007, on behalf of AER, H.Wen submitted SBIR Phase I proposal No. 0740050 to the NSF entitled "Develop an Autonomic-Healing Hot Mix Asphalt" for \$99,950, listing himself as the PI. H.Wen certified the accuracy of the proposal, and represented that AER employed five (5) employees, including B.Wen and P.Zhang as key personnel, providing their biographical sketches to the NSF and budgeting them for salaries.
- 95. On November 8, 2007, the NSF awarded the proposed SBIR Phase I project for \$99,015 to AER, effective January 1 through June 30, 2008, and on November 14, 2007, H.Wen requested that the PI change from himself to Dr. Keh Tsao, represented as having joined AER as a senior researcher. The NSF approved the PI change.
- 96. On November 29, 2007, H.Wen submitted a signed request for an initial payment of \$66,010 in Phase I award funds, certifying that "the primary employment of the

PI [Dr. Keh Tsao] is with this firm at the time of the award and will continue during the conduct of the research."

- 97. On April 14, 2008, H.Wen submitted a Phase IB proposal to the NSF from AER, for \$49,484, based upon a purported mandatory \$100,000 outside investment from ATM. In the Phase IB proposal, Keh Tsao was listed as the PI.
- 98. H.Wen included a letter of support and investment from ATM, dated March 24, 2008, and signed by Kelly Niu, Vice President, in which ATM represented that it would "commit a sum of \$50,000 on June 1, 2008 and another \$50,000 on October 1, 2008, contingent upon AER receiving the funding from the NSF." In return, AER would provide ATM with 10% ownership of the technology developed under the project.
- 99. On June 19, 2008, the NSF awarded \$49,482 to AER based on the representation that ATM would invest a total of \$100,000 in AER. As set forth previously, ATM was a company created by B.Wen, who had been listed as an AER employee in the Phase I proposal.
- 100. On July 13, 2008, AER filed its interim report electronically with the NSF, certifying that "work for which payment is hereby requested was done in accordance with the award terms and conditions" and that "willful provision of false information or concealing a material fact in this report or any other communication submitted to NSF is a criminal offense." The report certification contained handwritten signatures for H.Wen and K.Tsao, but no notarization. The report also certified to the NSF that Keh Tsao had worked more than 160 hours on the Phase I project and represented that ATM had made the purported \$100,000 investment.
- 101. Based upon a review of AER's bank records, AER received a \$40,000 credit from ATM on October 10, 2008, but there was no additional outside investment in the

amount of \$60,000 deposited into AER's bank account from ATM. Even if funds were transferred, they did not meet the definition and requirements of an eligible outside investment as set forth in the Phase IB Dear Colleague Letter providing that "eligible outside funding consists of investment from industrial partners, venture capitalists, angel investors, and non-SBIR/STTR grants and contracts from State and Federal Governments," and further addressed in written and oral presentations at the March 2008 Grantees Conference attended by both B.Wen and H.Wen, and in the September 2008 Grantees Conference attended by B.Wen, explicitly stating that in-kind loans, and self-funding are not acceptable forms of investment that qualify companies to receive Phase IB awards.

- 102. Based upon an interview of Keh Tsao on December 19, 2012, he stated that he never served as the PI on the NSF SBIR Award to AER; did not prepare the Phase I final report submitted; and did not sign the Phase I Report cover page.
- 103. On July 31, 2008, on behalf of AER, H.Wen electronically submitted Proposal No. 0848986 to the NSF, for \$499,534 for the Phase II project, again listing Keh Tsao as the PI, and listing 425 West Willow Court, Suite 248, Milwaukee, WI 53217 as AER's company address. H.Wen electronically signed this proposal submission.
- 104. In the proposal, H.Wen indicated that there were seven (7) current employees at AER. In addition, H.Wen represented that AER had received a total of \$1,210,000 in revenue in 2007 (\$310,000 in grant income, \$350,000 in contracts/services, and \$550,000 in other), and that ATM: "invested \$100,000 in AER for the Phase IB project. The funding is being used for technical development, business and commercialization activities."
- 105. Based upon a review of AER's 2007 tax returns and bank account records, as well as a review of NSF records, and information received from Keh Tsao, H.Wen provided

false information to NSF in the Phase II proposal regarding AER's personnel and the company's finances, in terms of both investments and income. Specifically, based upon a review of AER and ATM bank records, AER received a total of \$40,000 from ATM in 2007, and did not receive the \$1.2 million in income as represented by H.Wen in AER's Phase II proposal.

and IB awards, certifying that "work for which payment is hereby requested was done in accordance with the award terms and conditions" and that "willful provision of false information or concealing a material fact in this report or any other communication submitted to NSF is a criminal offense." The certified cover page was purportedly signed by H.Wen on January 3, 2009, and Keh Tsao on December 31, 2008.

107. On January 12, 2009, the NSF granted H.Wen's Phase II proposal, funding it for \$468,494 for the period of January 15, 2009, through December 31, 2010.

108. During the Phase II award period, H.Wen submitted multiple mandated interim project reports and a final report to the NSF, on July 31, 2009, January 31, 2010, July 31, 2010, and February 24, 2011, each providing mandatory milestone charts purportedly reporting how much was expended on the project, and the associated effort spent on the project by the senior personnel. Each one of these reports contained a Phase II report cover page that was certified, purportedly signed and dated by H.Wen and Keh Tsao.

as a review of the NSF records, and information received from Keh Tsao, H.Wen provided false information to the NSF in the Phase II reports and milestone charts regarding AER's personnel, effort expended, a subcontract to NTD and the company's finances, in terms of both income and expenditures.

- 110. In an email exchange with NSF Program Officer (PO) Ben Schrag, dated February 22, 2010, AER submitted a contract with NTD for an amount not to exceed \$119,835 for testing work associated with the NSF project. In email exchanges purportedly between H.Wen, Keh Tsao and Ben Schrag, AER committed to services that would be provided pursuant to the requested subcontract and provided an unsigned copy of the subcontract agreement with NTD, entitled: "Accelerated Testing of Self-healing Asphalt Mix (SHAM)."
- 111. Following that email exchange, the third and fourth interim reports were submitted through AER on July 31, 2010 and then February 24, 2011, certifying that AER had paid NTD \$60,684 and a total of \$121,368 in two installments. Both of these reports were purportedly certified, signed and dated by H.Wen and Keh Tsao.
- 112. The Phase II final report also included a commercialization report provided by H.Wen reflecting that in the 2010 to 2011 time period AER had 7 employees and current income of \$1.503 million.
- 113. AER's company bank records reflect that AER made a single payment of \$60,348 to NTD during the NSF Phase II reporting period, not the \$121,368 AER reported to NSF.
- 114. Further, as noted previously, based upon records obtained from Chase Bank, the NTD bank account to which these NSF award funds were transferred, was opened by H.Wen himself on December 3, 2007, using the residential address of his brother B.Wen and P.Zhang as NTD's business address, and H.Wen served as the only signatory on the signature card.
- 115. AER's bank records also reflect that it did not receive income of \$1.503 million in 2010 or 2011.

- 116. Finally, through the course of the NSF grant awards, there were emails purportedly exchanged between Keh Tsao, H.Wen and NSF PO Ben Schrag, in which these individuals exchanged information regarding the progress of the AER SBIR awards from NSF, and in which both Keh Tsao, using the email address <a href="mailto:ktsao@aderesearch.com">ktsao@aderesearch.com</a>, and H.Wen purportedly answered questions and provided information to NSF.
- 117. However, based upon information received from Keh Tsao, he did not use the email address ktsao@aderesearch.com, and did not work on the project or exchange information with the NSF PO. Further, Keh Tsao stated that he did not sign either the interim or final project reports. Finally, during the timeframe of the NSF awards to AER, Keh Tsao lived in Wisconsin.
- 118. In one such email, dated February 24, 2011, exchanging information about the fake NTD subcontract, Keh Tsao purportedly wrote from the email address ktsao@aderesearch.com: "For the project milestone, the time and budget were overspent. We listed them up to the projected levels." However, based upon the metadata on the email itself, it was sent from an IP address belonging to WSU, which is where H.Wen worked at the time.
- 119. Finally, H.Wen and/or AER provided letters of support to UEE for the following four proposals, purporting that AER would either provide significant investment funds to UEE for the SBIR projects, provide subcontract services to UEE, or serve as UEE's strategic partner.

| Proposal Number | Proposal Date | Investment or<br>Subcontract<br>Amount | Letter Signatory    |
|-----------------|---------------|--|---------------------|
| USDA            | 9/03/2007     | \$6,000 subcontract                    | Thomas Lou, with    |
| GRANT00332886 / |               |  | Harry Wen listed in |
| 2008-00039      |               | ,                                      | the budget for AER  |

| NSF 0711939               | 12/04/2006 | None; serve as strategic partner | Harry Wen |
|---------------------------|------------|----------------------------------|-----------|
| DOE DE-FG02-<br>07ER84797 | 04/18/2008 | \$30,000 subcontract             | Harry Wen |
| DOE DE-FG02-<br>08ER85081 | 04/17/2009 | \$400,000 investment             | Harry Wen |

- 120. Despite the fact that all of these UEE projects were funded, according to AER's bank records, AER did not have the financial resources to support the promised \$400,000 investment, nor were these investment funds transferred to UEE as promised in DOE DE-FG02-08ER85081 and H.Wen's AER letter of support.
- 121. Moreover, a review of AER and UEE bank account records establish that in the timeframe of this scheme, funds were exchanged between UEE and AER, and UEE provided more funds to AER than AER provided to UEE.

#### False Proposals Through WSU

- 122. H.Wen obtained federal research awards through WSU to include: (1) NSF STTR Proposal No. 1127426, effective December 1, 2011, to UEE with a mandatory sub award to WSU; and (2) Department of Transportation contract No. DTFH6114C00013, effective May 27, 2014, to WSU with a subcontract to UEE.
- 123. In proposals filed for these two projects, H.Wen and B.Wen represented that H.Wen had no financial interests in UEE. However, as set forth previously, based upon a review of federal government grant records maintained by the NSF and DOE, H.Wen, and/or his two companies, AER and NTD, had provided letters of support and investment for previous federal proposals submitted by UEE, in which H.Wen and/or his companies, AER and NTD, represented they would invest over \$1 million into UEE, and would receive ownership interests in associated technologies in exchange for such investments. Further, in NSF proposal Nos. 0822738, 0848605, and 0956737, it was represented that promised

investments from H.Wen, or his companies, AER and NTD, had been invested into UEE, as mandated.

#### **NSF Award No. 1127426**

- 124. On January 31, 2011, on behalf of UEE, B.Wen submitted STTR Phase II proposal No. 1127426, for a project entitled: "Waste Cooking Oil and Fly Ash Based Bioasphalt," which was awarded \$447,667, for the period December 1, 2011 through November 30, 2013.
- 125. H.Wen was listed as the Co-PI for this proposal, with a listed email address of haifang wen@wsu.edu. Under H.Wen's direction, WSU was budgeted to receive \$150,000 or 30% of the Phase II STTR award as mandated.
- 126. According to an email written by an NSF PO on October 6, 2011, upon being questioned regarding the relationship between H.Wen, B.Wen and UEE, B.Wen represented to NSF that H.Wen was not financially involved in UEE, and that other than the STTR sub award, H.Wen had no other connection to UEE.
- 127. Based upon a review of federal government grant records maintained by the NSF and DOE, H.Wen and/or AER had represented in a letter dated 03/09/2009, that AER would invest \$400,000 in UEE in exchange for 4% of the ownership of the technology developed under the DOE project; H.Wen and/or AER had represented in letters dated 08/29/2007 and 03/10/2008 that AER would serve as a paid consultant to UEE in one proposal filed with DOE and in one proposal filed with USDA; and, UEE used a letter of support promising a \$400,000 investment from NTD dated April 10, 2008, a company formed and owned by H.Wen, with a bank account opened and controlled by H.Wen. In

several of these letters, H.Wen or his companies, NTD or AER, were to receive ownership interests in UEE technology as a result of the purported investments.

- 128. During the award period for proposal No. 1127426, B.Wen electronically submitted multiple mandated interim project reports and a final report to NSF, on June 15, 2012, January 16, 2013, July 3, 2013 and December 20, 2013 respectively, each with a milestone chart, and a certified cover page, signed and dated by B.Wen.
- 129. According to these milestone charts, \$150,000 was transferred on or around and between December 1, 2011 and November 30, 2013 from UEE to WSU for the subcontract under the direction of H.Wen.
- 130. In the commercialization portion of the Phase II Final Report, dated December 20, 2013, B.Wen listed the UEE company address of 111 Ridge Road, Horseheads, NY 14845, and informed NSF that the company had five employees at the end of the award period, with revenue of \$1.2 million, with 74% of that revenue coming from "SBIRs (from all agencies.)"
- 131. In an email, dated February 9, 2014, the NSF PO Prakash Balan informed B.Wen that he had received his final project report, and that:

"Prior to NSF authorizing payment on your Phase II Final Report, could you please review the attached document 'grant policies and conditions' and send me a note that your company has reviewed this document and has met all the terms laid out in the context of your Phase II Grant?"

On the same date, B.Wen responded: "I have reviewed the policies and conditions and our company has met all of the terms laid out in the context of our Phase II Grant."

#### The DOT Contract No. DTFH6114C00013

- 132. According to records maintained by the DOT, on or about October 14, 2013, H.Wen submitted a proposal to DOT from WSU, for a project entitled "Novel Development of Bio-based Binder for Sustainable Construction." H.Wen, Assistant Professor, WSU, was to serve as the PI on the project, with a listed email address of haifang wen@wsu.edu.
- 133. According to the WSU proposal to DOT, UEE was identified as the subcontractor, and was budgeted to receive a total of \$299,818 over a three year period of time. UEE's address was listed as 111 Ridge Road, Horseheads, NY 14845, with B.Wen identified as the Co-PI from UEE.
- 134. The proposal included a representation that: "The PI, Haifang Wen, does not have any financial interest/stake/partnership with UEE, LLC."
- 135. DOT awarded a cost reimbursable contract, No. DTFH6114C00013, effective May 27, 2014 through May 27, 2018, for a total of \$999,940, with UEE as the approved subcontractor, as specified in the proposal. The contract was signed by H.Wen on April 7, 2014.
- 136. As set forth previously, based upon a review of federal government grant records maintained by the NSF and DOE, H.Wen, and/or his two companies, AER and NTD, had provided letters of support and investment for previous federal proposals submitted by UEE, in which H.Wen and/or his companies, AER and NTD, represented they would invest over \$1 million into UEE, and would receive ownership interests in associated technologies in exchange for such investments.
- 137. An invoice from WSU, dated April 22, 2015, showed that UEE was paid \$28,500 from this DOT contract on or about March 25, 2015.

138. An invoice from WSU, dated November 6, 2015, showed that UEE was paid \$96,900 from this DOT contract on or about July 21, 2015.

#### MONEY LAUNDERING TRANSACTIONS

- 139. As set forth in the above paragraphs, federal grant funds were obtained under false pretenses and resulted in the following transfers of funds from the federal government to specified bank accounts held by B.Wen, P.Zhang, and H.Wen, and their associated companies, UEE, AER, ATM, RM and NTD.
- 140. Based on a review of bank records, and information obtained from the government agencies that awarded research grants to UEE and AER, bank accounts in the name of UEE at HSBC Bank, KeyBank, Bank of America (BOA), Chemung Canal Trust Company (Chemung) and one account in the name of AER at Wells Fargo Bank, N.A. (Wells Fargo) have been identified as receiving electronic deposits of fraudulently obtained research funds from the federal government during the time period July of 2007 thru September of 2015.
- 141. In or about 2010, HSBC Account #327-233327-3 in the name of UEE was opened, and the Corporate Resolutions list P. Zhang as the Owner/Principal and B. Wen as a Principal of UEE. The signature card for KeyBank Account#327210058621 in the name of UEE shows the account was opened on May 24, 2004 and lists P. Zhang as the signer on the account. The signature card for BOA Account #483038454368 in the name of UEE shows the account was opened on August 25, 2011 and lists P. Zhang as the signer on the account as the President of UEE. On November 23, 2013, Chemung purchased the BOA branch where the accounts held by UEE were maintained making the signature card for BOA Account #483038454368 and Chemung Account #208454368 in the name of UEE

the same card. Statements for the bank accounts in the name of UEE were addressed to UEE at 111 Ridge Road, Horseheads, NY 14845. The signature card for Wells Fargo Account #5865503253 in the name of AER shows that it was opened on February 2, 2006, listing H. Wen as the authorized signatory on the account.

142. The chart attached as Exhibit A to this affidavit summarizes the \$9 million in fraudulently obtained research funds that UEE and AER received from the federal government during the time period July 2007 thru September 2015. Specifically, Exhibit A shows that \$5,222,670.99 was deposited to HSBC Account #327-233327-3 in the name of UEE; \$377,966.24 was deposited to KeyBank Account #327210058621 in the name of UEE; \$1,671,820.73 was deposited to BOA Account #483038454368 in the name of UEE; \$1,138,443.04 was deposited to Chemung Account #208454368 in the name of UEE; and \$616,991 was deposited to Wells Fargo Account #5865503253 in the name of AER.

143. P. Zhang, B. Wen and H. Wen subsequently utilized the fraudulent research funds, which represent proceeds of a specified unlawful activity, namely wire fraud, deposited to the bank accounts of UEE and AER listed above, to conduct monetary transactions in excess of \$10,000 in violation of Title 18 U.S.C § 1957, which are detailed in the following chart: (please note this chart represents only a sample of the violations of Title 18 U.S.C § 1957 violations and is not all inclusive)

| Date of<br>Transaction | Amount of Transaction | Description   | Bank Account      |
|------------------------|-----------------------|---|-------------------|
|                        |                       | Cash Disbursement UEET Invoice - transferred to HSBC Account #327-250712 in the |                   |
| 07/14/2009             | \$51,732.58           | name of ATM   | HSBC #327-23327-3 |
| 04/14/2010             | \$19,000.00           | Check #10069 Payable to   | HSBC #327-23327-3 |

# Scottrade

| 07/28/2010 | \$29,480.00  | Cash Disbursement UEET -<br>transferred to HSBC Account<br>#327-250712 in the name of<br>ATM                  | HSBC #327-23327-3        |
|------------|--------------|---|--------------------------|
| 11/19/2010 | \$70,000.00  | Cash Disbursement UEET -<br>transferred to KeyBank Act<br>#327210058621 in the name of<br>UEE                 | HSBC #327-23327-3        |
| 02/15/2011 | \$20,000.00  | Payment to UEET Owner Draw - transferred to HSBC Act #327-255510 in the name of Ben Wen & Jessica Zhang       | HSBC #327-23327-3        |
| 02/18/2011 | \$80,000.00  | Payment to UEET Owner Draw - transferred to HSBC Act #327-255510 in the name of Ben Wen & Jessica Zhang       | HSBC #327-23327-3        |
| 03/23/2011 | \$120,000.00 | Payment to UEET Profit -<br>transferred to HSBC Act #327-<br>255510 in the name of Ben<br>Wen & Jessica Zhang | HSBC #327-23327-3        |
| 07/06/2011 | \$15,000.00  | Check #10208 Payable to<br>Scottrade  | HSBC #327-23327-3        |
| 10/03/2011 | \$15,000.00  | Check #10228 Payable to<br>Scottrade  | HSBC #327-23327-3        |
| 01/31/2012 | \$17,992.80  | Payment to UEET Owner Draw - transferred to HSBC Act #327-255510 in the name of Ben Wen & Jessica Zhang       | HSBC #327-23327-3        |
| 05/24/2012 | \$16,920.01  | Cash Disbursement UEET<br>Invoice-money transferred to<br>Chemung Act #137014155 in<br>the name of RM         | HSBC #327-23327-3        |
| 04/17/2009 | \$40,000.00  | Transfer to KeyBank Act #326907002546 in the name of  | KeyBank<br>#327210058621 |

# UEE

| 02/01/2011 | \$30,000.00  | Transfer to KeyBank Act<br>#326907002546 in the name of<br>UEE | KeyBank<br>#327210058621 |
|------------|--------------|--|--------------------------|
| 06/16/2011 | \$100,000.00 | Transfer to KeyBank Act<br>#326907002546 in the name of<br>UEE | KeyBank<br>#327210058621 |
| 08/03/2012 | \$36,684.00  | Check #5007 Payable to<br>Scottrade                            | BOA<br>#483038454368     |
| 08/03/2012 | \$25,000.00  | Check #5008 Payable to<br>Scottrade                            | BOA<br>#483038454368     |
| 09/13/2012 | \$110,000.00 | Transfer to BOA<br>#483040211120 in the name of<br>UEE         | BOA<br>#483038454368     |
| 12/28/2012 | \$60,000.00  | Transfer to BOA<br>#483040211120 in the name of<br>UEE         | BOA<br>#483038454368     |
| 01/23/2013 | \$90,000.00  | Transfer UEE - transferred to CCU #30202130 in the name of UEE | BOA<br>#483038454368     |
| 01/31/2013 | \$80,000.00  | Transfer to BOA<br>#483040211120 in the name of<br>UEE         | BOA<br>#483038454368     |
| 03/05/2013 | \$60,000.00  | Transfer UEE - transferred to CCU #30202130 in the name of UEE | BOA<br>#483038454368     |
| 05/01/2013 | \$150,000.00 | Transfer to BOA<br>#483040211120 in the name of<br>UEE         | BOA<br>#483038454368     |
| 07/30/2013 | \$27,550.00  | Transfer to Kurtz Trading LLC                                  | BOA<br>#483038454368     |
| 08/22/2013 | \$120,000.00 | Transfer to BOA<br>#483040211120 in the name of                | BOA<br>#483038454368     |

# UEE

| 01/31/2014 | \$10,348.05  | Transfer to CCU #30339720 in the name of P. Zhang                | Chemung #208454368         |
|------------|--------------|--|----------------------------|
| 04/01/2014 | \$10,625.85  | Transfer to CCU #30339720 in the name of P. Zhang                | Chemung<br>#208454368      |
| 04/30/2014 | \$70,000.00  | Transfer to Chemung Savings<br>Act #220211120 - UEE              | Chemung #208454368         |
| 05/06/2014 | \$60,000.00  | Transfer to Chemung Savings<br>Act #220211120 - UEE              | Chemung<br>#208454368      |
| 06/13/2014 | \$52,000.00  | Transfer to Chemung Savings<br>Act #220211120 - UEE              | Chemung #208454368         |
| 06/30/2014 | \$100,000.00 | Transfer to Chemung Savings<br>Act #220211120 - UEE              | Chemung<br>#208454368      |
| 08/01/2014 | \$70,000.00  | Transfer to Chemung Savings<br>Act #220211120 - UEE              | Chemung<br>#208454368      |
| 05/14/2015 | \$50,000.00  | Transfer to Chemung Savings<br>Act #220211120 - UEE              | Chemung #208454368         |
| 06/08/2015 | \$18,955.45  | Transfer to CCU #30339720 in the name of P. Zhang                | Chemung<br>#208454368      |
| 07/07/2008 | \$100,000.00 | Transfer to AER Business<br>Savings Act #8302086957              | Wells Fargo<br>#5865503253 |
| 01/20/2009 | \$30,000.00  | Transfer to Checking Act<br>#1583943202 in the name of H.<br>Wen | Wells Fargo<br>#5865503253 |
| 01/28/2009 | \$115,000.00 | Transfer to AER Business<br>Savings Act #8302086957              | Wells Fargo<br>#5865503253 |
| 02/16/2010 | \$90,000.00  | Transfer to Wells Fargo<br>#9931123286 in the name of H.<br>Wen  | Wells Fargo<br>#5865503253 |
| 08/13/2010 | \$100,000.00 | Transfer to Wells Fargo<br>#9931123286 in the name of H.<br>Wen  | Wells Fargo<br>#5865503253 |

Transfer to Wells Fargo #9931123286 in the name of H.

03/04/2011 \$70,000.00

Wen

Wells Fargo #5865503253

#### REQUEST FOR SEALING

1. It is respectfully requested that this Court issue an order that the criminal complaint, arrest warrant, and this affidavit in support of a criminal complaint, and all attachments thereto be filed under seal until further order of this Court. I believe that sealing these documents is necessary because the information is relevant to an ongoing investigation and that disclosure of this information may jeopardize an ongoing investigation by the NSF OIG and could lead to witness tampering, flight to avoid prosecution, and the destruction of evidence.

#### CONCLUSION

Based on the above facts and on my experience and training, I believe there is probable cause to conclude that B. Wen, P. Zhang and H. Wen have committed violations of 18 U.S.C. §§ 286 and 287(conspiracy to make false claims and making false claims);18 U.S.C. § 1343 (wire fraud), conspiracy to commit wire fraud in violation of 18 U.S.C. §1349, a scheme to transfer funds obtained through specified unlawful activities in violation of 18 U.S.C.§1957, and conspiracy to commit money laundering 18 U.S.C.§1956(h).

I declare under penalty of perjury that the statements above are true and correct to the best of my knowledge and belief.

CRAÍG FURÉ

Special Agent

US Department of Transportation

Office of Inspector General

Subscribed to and sworn before me this <u>12</u> day of February 2016

MARIAN W. PAYSON

Marion WTays

United States Magistrate Judge

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Exhibit A
Summary of Fraudulent Research Payments Made to UEE and AER
During the Time Period July of 2007 through September of 2015

| Date       | Amo      | ount of Payment         | Agency     | Grant #                               | Company | Bank | Acct #    |
|------------|----------|-------------------------|------------|---------------------------------------|---------|------|-----------|
| 7/2/2007   | \$       | 66,667.00               | NSF        | 0711939                               | UEE     | HSBC | 327233273 |
| 7/11/2007  | \$       | 2,918.93                | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 8/14/2007  | \$       | 10,000.00               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 9/4/2007   | \$       | 8,352.31                | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 9/28/2007  | \$       | 11,676.78               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 10/31/2007 | \$       | 11,709.89               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 11/27/2007 | \$       | 10,848.08               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 12/10/2007 | \$       | 50,000.00               | NSF        | 0802702                               | UEE     | HSBC | 327233273 |
| 12/27/2007 | \$       | 7,959.52                | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 1/2/2008   | \$       | 66,667.00               | NSF        | 0738266                               | UEE     | HSBC | 327233273 |
| 1/31/2008  | \$       | 10,321.20               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 3/11/2008  | \$       | 9,408.82                | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 4/3/2008   | \$       | 16,804.47               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 6/30/2008  | \$       | 50,000.00               | NSF        | 0833792                               | UEE     | HSBC | 327233273 |
| 7/1/2008   | \$       | 66,667.00               | NSF        | 0810670                               | UEE     | HSBC | 327233273 |
| 7/17/2008  | \$       | 125,000.00              | NSF        | 0822738                               | UEE     | HSBC | 327233273 |
| 7/18/2008  | \$       | 33,333.00               | NSF        | 0711939                               | UEE     | HSBC | 327233273 |
| 10/30/2008 | \$       | 12,878.99               | DOE        | DE-FG02-08ER85081                     | UEE     | HSBC | 327233273 |
| 1/6/2009   | \$       | 36,631.58               | DOE        | DE-FG02-08ER85081                     | UEE     | HSBC | 327233273 |
| 1/7/2009   | \$       | 50,000.00               | NSF        | 0902852                               | UEE     | HSBC | 327233273 |
| 1/14/2009  | \$       | 26,964.98               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 1/16/2009  | \$       | 33,333.00               | NSF        | 0738266                               | UEE     | HSBC | 327233273 |
| 2/23/2009  | \$       | 24,741.44               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 2/23/2009  | \$       | 13,087.21               | DOE        | DE-FG02-08ER85081                     | UEE     | HSBC | 327233273 |
| 3/2/2009   | \$       | 100,000.00              | NSF        | 0822738                               | UEE     | HSBC | 327233273 |
| 4/2/2009   | \$       | 124,997.00              | NSF        | 0848605                               | UEE     | HSBC | 327233273 |
| 4/6/2009   | \$       | 37,402.22               | DOE        | DE-FG02-08ER85081                     | UEE     | HSBC | 327233273 |
| 4/17/2009  | \$       | 59,921.24               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 7/2/2009   | \$       | 100,000.00              | NSF        | 0930629                               | UEE     | HSBC | 327233273 |
|            |          | 33,333.00               | NSF        | 0810670                               | UEE     | HSBC | 327233273 |
| 7/24/2009  | \$       |                         | NSF        | 0822738                               | UEE     | HSBC | 327233273 |
| 9/2/2009   | \$<br>\$ | 100,000.00<br>55,170.33 | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 10/15/2009 |          |                         | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 10/30/2009 | \$       | 44,615.59<br>99,998.00  | NSF        | 0848605                               | UEE     | HSBC | 327233273 |
| 11/18/2009 | \$       | 205,229.06              | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 1/29/2010  | · · · ·  |                         |            | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 3/16/2010  | \$       | 67,023.56<br>100,000.00 | DOE<br>NSF | 0822738                               | UEE     | HSBC | 327233273 |
| 3/16/2010  | \$       | 104,890.67              | DOE        | DE-SC0003404                          | UEE     | HSBC | 327233273 |
| 4/12/2010  | \$       |                         | NSF        | 0956737                               | UEE     | HSBC | 327233273 |
| 4/15/2010  | \$       | 103,376.00              | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 4/27/2010  | \$       | 55,437.32               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 5/4/2010   | \$       | 124,227.00              | NSF        | 0848605                               | UEE     | HSBC | 327233273 |
| 5/4/2010   | \$       | 99,998.00               |            | · · · · · · · · · · · · · · · · · · · | UEE     | HSBC | 327233273 |
| 5/6/2010   | \$       | 26,739.27               | DOE        | DE-FG02-08ER85081                     | UEE     | HSBC | 327233273 |
| 6/4/2010   | \$       | 87,441.00               | NSF        | 1039462                               | UEE     | HSBC | 327233273 |
| 6/8/2010   | \$       | 45,099.33               | DOE        | DE-SC0003404                          | UEE     | HSBC | 327233273 |
| 6/17/2010  | \$       | 110,501.04              | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 6/17/2010  | \$       | 91,089.98               | DOE        | DE-FG02-08ER85081                     | UEE     | HSBC | 327233273 |
| 7/28/2010  | \$.      | 42,129.55               | DOE        | DE-FG02-07ER84797                     |         |      | 327233273 |
| 7/28/2010  | \$       | 32,036.67               | DOE        | DE-FG02-08ER85081                     | UEE     | HSBC |           |
| 8/4/2010   | \$       | 50,000.00               | NSF        | 0930629                               | UEE     | HSBC | 327233273 |
| 8/19/2010  | \$       | 28,323.15               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |
| 9/17/2010  | \$       | 29,575.74               | DOE        | DE-FG02-07ER84797                     | UEE     | HSBC | 327233273 |

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Exhibit A
Summary of Fraudulent Research Payments Made to UEE and AER
During the Time Period July of 2007 through September of 2015

| 10/6/2010  | \$<br>99,998.00  | NSF  | 0848605                           | UEE | HSBC    | 327233273    |
|------------|------------------|------|-----------------------------------|-----|---------|--------------|
| 11/17/2010 | \$<br>82,701.00  | NSF  | 0956737                           | UEE | HSBC    | 327233273    |
| 12/22/2010 | \$<br>19,684.57  | DOE  | DE-SC0004621                      | UEE | HSBC    | 327233273    |
| 12/22/2010 | \$<br>121,949.49 | DOE  | DE-FG02-08ER85081                 | UEE | HSBC    | 327233273    |
| 1/7/2011   | \$<br>87,440.00  | NSF  | 1039462                           | UEE | HSBC    | 327233273    |
| 1/21/2011  | \$<br>23,673.71  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 2/4/2011   | \$<br>42,995.14  | DOE  | DE-SC0004621                      | UEE | HSBC    | 327233273    |
| 2/11/2011  | \$<br>55,981.81  | DOE  | DE-FG02-08ER85081                 | UEE | HSBC    | 327233273    |
| 2/16/2011  | \$<br>74,998.00  | NSF  | 0848605                           | UEE | HSBC    | 327233273    |
| 3/15/2011  | \$<br>75,000.00  | NSF  | 0822738                           | UEE | HSBC    | 327233273    |
| 3/16/2011  | \$<br>47,487.04  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 3/29/2011  | \$<br>55,491.14  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 4/1/2011   | \$<br>37,210.29  | DOE  | DE-SC0004621                      | UEE | HSBC    | 327233273    |
| 4/22/2011  | \$<br>49,102.46  | DOE  | DE-FG02-08ER85081                 | UEE | HSBC    | 327233273    |
| 5/3/2011   | \$<br>79,113.56  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 5/3/2011   | \$<br>46,993.16  | DOE  | DE-SC0003404<br>DE-FG02-08ER85081 | UEE | HSBC    | 327233273    |
| 5/18/2011  | <br>82,701.00    | NSF  | <del>{</del>                      | UEE | HSBC    | <del> </del> |
| 6/14/2011  | \$               |      | 0956737                           |     |         | 327233273    |
|            | \$<br>43,947.16  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 6/14/2011  | \$<br>65,121.63  | DOE  | DE-FG02-08ER85081                 | UEE | HSBC    | 327233273    |
| 6/30/2011  | \$<br>36,171.56  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 8/11/2011  | \$<br>117,978.11 | DOE  | DE-FG02-08ER85081                 | UEE | HSBC    | 327233273    |
| 9/14/2011  | \$<br>19,618.92  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 9/29/2011  | \$<br>71,812.39  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 10/31/2011 | \$<br>18,711.42  | DOE  | DE-FG02-08ER85081                 | UEE | HSBC    | 327233273    |
| 11/15/2011 | \$<br>82,701.00  | NSF  | 0956737                           | UEE | HSBC    | 327233273    |
| 12/6/2011  | \$<br>68,033.91  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 12/14/2011 | \$<br>12,230.28  | DOE  | DE-SC0004621                      | UEE | HSBC    | 327233273    |
| 12/21/2011 | \$<br>44,068.05  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 1/3/2012   | \$<br>111,917.00 | NSF  | 1127426                           | UEE | HSBC    | 327233273    |
| 1/9/2012   | \$<br>92,222.38  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 1/19/2012  | \$<br>156,644.50 | DOE  | DE-SC0004621                      | UEE | HSBC    | 327233273    |
| 3/6/2012   | \$<br>33,520.43  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 3/7/2012   | \$<br>71,476.57  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 3/20/2012  | \$<br>62,026.00  | NSF  | 0956737                           | UEE | HSBC    | 327233273    |
| 3/22/2012  | \$<br>35,504.41  | DOE  | DE-SC0004621                      | UEE | HSBC    | 327233273    |
| 3/30/2012  | \$<br>41,317.64  | DOE  | DE-SC0003404                      | UEE | HSBC    | 327233273    |
| 5/3/2012   | \$<br>24,630.34  | DOE  | DE-SC0004621                      | UEE | HSBC    | 327233273    |
| 5/15/2012  | \$<br>15,971.00  | NSF  | 1240215                           | UEE | HSBC    | 327233273    |
| 6/19/2008  | \$<br>2,666.22   | USDA | 2008-33610-18914                  | UEE | KeyBank | 327210058621 |
| 9/15/2008  | \$<br>8,951.87   | USDA | 2008-33610-18914                  | UEE | KeyBank | 327210058621 |
| 4/17/2009  | \$<br>46,693.09  | USDA | 2008-33610-18914                  | UEE | KeyBank | 327210058621 |
| 5/29/2009  | \$<br>9,688.82   | USDA | 2008-33610-18914                  | UEE | KeyBank | 327210058621 |
| 4/22/2010  | \$<br>12,000.00  | USDA | 2008-33610-18914                  | UEE | KeyBank | 327210058621 |
| 1/21/2011  | \$<br>45,000.00  | USDA | 2010-33610-20887                  | UEE | KeyBank | 327210058621 |
| 1/31/2011  | \$<br>32,460.94  | USDA | 2010-33610-20887                  | UEE | KeyBank | 327210058621 |
| 3/29/2011  | \$<br>3,539.06   | USDA | 2010-33610-20887                  | UEE | KeyBank | 327210058621 |
| 6/16/2011  | \$<br>57,835.00  | USDA | 2010-33610-21358                  | UEE | KeyBank | 327210058621 |
| 6/16/2011  | \$<br>41,544.38  | USDA | 2010-33610-21358                  | UEE | KeyBank | 327210058621 |
| 9/16/2011  | \$<br>9,000.00   | USDA | 2010-33610-21338                  | UEE | KeyBank | 327210058621 |
| 9/29/2011  | \$<br>49,001.87  | USDA | 2010-33610-20007                  | UEE | KeyBank | 327210058621 |
| 12/15/2011 | \$<br>           | USDA | 2010-33610-21358                  | UEE | KeyBank | 327210058621 |
|            | 21,940.31        |      |                                   |     | KeyBank |              |
| 2/1/2012   | \$<br>7,403.32   | USDA | 2010-33610-21358                  | UEE |         | 327210058621 |
| 3/9/2012   | \$<br>25,647.97  | USDA | 2010-33610-21358                  | UEE | KeyBank | 327210058621 |

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# Exhibit A Summary of Fraudulent Research Payments Made to UEE and AER During the Time Period July of 2007 through September of 2015

| 12/19/2013 | \$<br>4,593.39   | DOE  | DE-SC0008207     | UEE | KeyBank | 327210058621 |
|------------|------------------|------|------------------|-----|---------|--------------|
| 5/10/2012  | \$<br>1.00       | USDA | 2010-33610-21358 | UEE | BoA     | 483038454368 |
| 5/11/2012  | \$<br>33,916.33  | USDA | 2010-33610-21358 | UEE | BoA     | 483038454368 |
| 5/30/2012  | \$<br>67,286.82  | USDA | 2010-33610-21358 | UEE | BoA     | 483038454368 |
| 6/5/2012   | \$<br>42,066.45  | DOE  | DE-SC0003404     | UEE | BoA     | 483038454368 |
| 6/14/2012  | \$<br>6,967.31   | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 6/29/2012  | \$<br>62,645.10  | DOE  | DE-SC0003404     | UEE | BoA     | 483038454368 |
| 6/29/2012  | \$<br>48,414.87  | DOE  | DE-SC0003404     | UEE | BoA     | 483038454368 |
| 6/29/2012  | \$<br>14,785.42  | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 7/17/2012  | \$<br>89,533.00  | NSF  | 1127426          | UEE | BoA     | 483038454368 |
| 9/12/2012  | \$<br>118,907.12 | DOE  | DE-SC0003404     | UEE | BoA     | 483038454368 |
| 9/26/2012  | \$<br>34,714.78  | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 9/27/2012  | \$<br>39,704.29  | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 9/27/2012  | \$<br>18,796.53  | DOE  | DE-SC0008207     | UEE | BoA     | 483038454368 |
| 10/30/2012 | \$<br>34,544.33  | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 11/16/2012 | \$<br>10,325.90  | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 11/16/2012 | \$<br>27,797.58  | DOE  | DE-SC0008207     | UEE | BoA     | 483038454368 |
| 11/30/2012 | \$<br>40,018.25  | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 11/30/2012 | \$<br>19,710.38  | DOE  | DE-SC0008207     | UEE | BoA     | 483038454368 |
| 12/24/2012 | \$<br>23,279.63  | DOE  | DE-SC0008207     | UEE | ВоА     | 483038454368 |
| 12/28/2012 | \$<br>77,620.04  | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 1/23/2013  | \$<br>95,423.00  | USDA | 2010-33610-21358 | UEE | BoA     | 483038454368 |
| 1/28/2013  | \$<br>89,533.00  | NSF  | 1127426          | UEE | BoA     | 483038454368 |
| 2/6/2013   | \$<br>32,455.71  | DOE  | DE-SC0008207     | UEE | BoA     | 483038454368 |
| 2/11/2013  | \$<br>37,088.40  | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 3/5/2013   | \$<br>56,809.36  | DOE  | DE-SC0004621     | UEE | ВоА     | 483038454368 |
| 3/5/2013   | \$<br>13,300.17  | DOE  | DE-SC0008207     | UEE | ВоА     | 483038454368 |
| 4/3/2013   | \$<br>14,479.00  | DOE  | DE-SC0008207     | UEE | ВоА     | 483038454368 |
| 5/1/2013   | \$<br>168,048.62 | DOE  | DE-SC0004621     | UEE | ВоА     | 483038454368 |
| 6/20/2013  | \$<br>53,471.33  | DOE  | DE-SC0004621     | UEE | ВоА     | 483038454368 |
| 7/15/2013  | \$<br>54,829.39  | DOE  | DE-SC0004621     | UEE | ВоА     | 483038454368 |
| 7/17/2013  | \$<br>89,533.00  | NSF  | 1127426          | UEE | BoA     | 483038454368 |
| 8/20/2013  | \$<br>142,031.05 | DOE  | DE-SC0004621     | UEE | BoA     | 483038454368 |
| 9/30/2013  | \$<br>10,721.86  | DOE  | DE-SC0008207     | UEE | ВоА     | 483038454368 |
| 10/11/2013 | \$<br>3,061.71   | USDA | 2013-33610-21084 | UEE | ВоА     | 483038454368 |
| 1/10/2014  | \$<br>1.00       | USDA | 2013-33610-21084 | UEE | Chemung | 208454368    |
| 1/13/2014  | \$<br>20,595.22  | USDA | 2013-33610-21084 | UEE | Chemung | 208454368    |
| 1/22/2014  | \$<br>49,606.68  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 2/18/2014  | \$<br>67,151.00  | NSF  | 1127426          | UEE | Chemung | 208454368    |
| 3/10/2014  | \$<br>21,544.79  | USDA | 2013-33610-21084 | UEE | Chemung | 208454368    |
| 3/13/2014  | \$<br>41,292.78  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 4/28/2014  | \$<br>18,782.18  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 5/1/2014   | \$<br>34,797.28  | USDA | 2013-33610-21084 | UEE | Chemung | 208454368    |
| 5/2/2014   | \$<br>52,979.44  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 6/13/2014  | \$<br>58,899.90  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 6/30/2014  | \$<br>114,084.54 | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 8/1/2014   | \$<br>84,022.81  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 9/4/2014   | \$<br>30,524.88  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 10/3/2014  | \$<br>23,918.79  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 11/4/2014  | \$<br>43,336.07  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 12/31/2014 | \$<br>13,716.27  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 2/11/2015  | \$<br>40,843.80  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |
| 3/4/2015   | \$<br>43,949.26  | DOE  | DE-SC0008207     | UEE | Chemung | 208454368    |

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# Exhibit A

# Summary of Fraudulent Research Payments Made to UEE and AER During the Time Period July of 2007 through September of 2015

| 4/6/2015        | \$  | 40,710.17  | DOE          | DE-SC0008207             | UEE            | Chemung              | 208454368  |  |  |
|-----------------|---|--|--------------|--------------------------|----------------|----------------------|------------|--|--|
| 5/4/2015        | \$  | 91,619.57  | DOE          | DE-SC0008207             | UEE            | Chemung              | 208454368  |  |  |
| 6/4/2015        | \$  | 78,370.10  | DOE          | DE-SC0008207             | UEE            | Chemung              | 208454368  |  |  |
| 7/9/2015        | \$  | 83,374.45  | DOE          | DE-SC0008207             | UEE            | Chemung              | 208454368  |  |  |
| 9/4/2015        | \$  | 84,322.06  | DOE          | DE-SC0008207             | UEE            | Chemung              | 208454368  |  |  |
| 1/4/2008        | \$  | 66,010.00  | NSF          | 0740050                  | AER            | Wells Fargo          | 5865503253 |  |  |
| 7/2/2008        | \$  | 49,482.00  | NSF          | 0833863                  | AER            | Wells Fargo          | 5865503253 |  |  |
| 1/9/2009        | \$  | 33,005.00  | NSF          | 0740050                  | AER            | Wells Fargo          | 5865503253 |  |  |
| 1/27/2009       | \$  | 117,124.00   | NSF          | 0848986                  | AER            | Wells Fargo          | 5865503253 |  |  |
| 8/11/2009       | \$  | 93,698.00  | NSF          | 0848986                  | AER            | Wells Fargo          | 5865503253 |  |  |
| 2/16/2010       | \$  | 93,699.00  | NSF          | 0848986                  | AER            | Wells Fargo          | 5865503253 |  |  |
| 8/13/2010       | \$  | 93,699.00  | NSF          | 0848986                  | AER            | Wells Fargo          | 5865503253 |  |  |
| 3/3/2011        | \$  | 70,274.00  | NSF          | 0848986                  | AER            | Wells Fargo          | 5865503253 |  |  |
|                 | \$  | 9,027,892.00   | Total Frau   | dulent Research Fund     | ls Paid to UE  | E and AER            |            |  |  |
|                 |   |  |              |                          |                |                      |            |  |  |
|                 |   |  |              |                          |                |                      |            |  |  |
| \$ 5,222,670.99 | Tota  | l Fraudulent Rese  | arch Funds I | Deposited to HSBC Accour | nt #327-233327 | 3 in the name of UE  | E          |  |  |
| \$ 377,966.24   | Tota  | l Fraudulent Rese  | arch Funds I | Deposited to KeyBank Acc | ount #3272100  | 58621 in the name o  | f UEE      |  |  |
| \$ 1,671,820.73 |   |  |              |                          |                |                      |            |  |  |
| \$ 1,138,443.04 | Tota  | Total Fraudulent Research Funds Deposited to Chemung Account #208454368 in the name of UEE |              |                          |                |                      |            |  |  |
| \$ 616,991.00   | Tota  | Fraudulent Rese  | arch Funds I | Deposited To Wells Fargo | Account#58655  | 03253 in the name of | of AER     |  |  |
| \$ 9,027,892.00 | Total Fraudulent Research Funds Paid to UEE and AER |  |              |                          |                |                      |            |  |  |